

PACKET PROCESSOR WITH REAL-TIME EDIT PROGRAM CONSTRUCTION ENGINE

ABSTRACT

A switch includes one or more programmable packet switching controllers. The programmable packet switching controller has a real-time edit program construction engine. The edit program construction engine receives packet data, e.g., the header data, and disposition decisions generated by, for example, an application engine. The edit program construction engine uses the packet data and the disposition decisions to construct edit programs in real-time. The edit programs include a number of instructions for performing operations, such as COPY, DELETE, RECORD, PLAYBACK, INSERT and OVERWRITE, and are stored in an instruction RAM associated with an edit engine. The edit engine executes the instructions to modify inbound packets in order to transmit them as outbound packets.